

Chemical Analysis Report

SO-DIST-2019-05-02-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Highlands**
Request ID: **RQ-2019-04-29-20**
Customer: **SO-DIST**
Project ID: **SMP**

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FLDEP South District Office
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Date Certified: 17-MAY-2019 15:29



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical group are included in this report: Nutrients.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Grassy Creek @CR621E

Collection Date/Time: 05/01/2019 09:55

Field ID: G4SD0165

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2082680	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P363261	
	EPA 300.0 Rev. 2.1	Chloride	20	A	mg Cl/L	P363557	
		Sulfate	26	A	mg SO4/L	P363559	
	SM 2120 B	Color (true)	23		PCU	P363281	
	SM 2320 B-97	Total Alkalinity	9.9		mg CaCO3/L	P363868	
	SM 2540 C-97	TDS	113		mg/L	P363571	
	SM 2540 D-97	TSS	2	U	mg/L	P363452	
	SM 4500 F-C-97	Fluoride	0.053	I	mg F/L	P363761	
2082682	EPA 350.1 Rev. 2.0	Ammonia-N	0.061		mg N/L	P363632	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.61		mg N/L	P363706	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.044		mg N/L	P363310	
	EPA 365.1 Rev. 2.0	Total-P	0.019		mg P/L	P363350	
	SM 5310 B-00	Organic Carbon	8.6		mg C/L	P363433	
2082684	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P363255	

Sample Location: Little Charlie Bowlegs

Collection Date/Time: 05/01/2019 12:30

Field ID: G3SD0093

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2082681	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P363261	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P363557	
		Sulfate	3.2		mg SO4/L	P363559	
	SM 2120 B	Color (true)	270		PCU	P363281	
	SM 2320 B-97	Total Alkalinity	7.1		mg CaCO3/L	P363868	
	SM 2540 C-97	TDS	138		mg/L	P363571	
	SM 2540 D-97	TSS	4	I	mg/L	P363452	
	SM 4500 F-C-97	Fluoride	0.088	I	mg F/L	P363761	
2082683	EPA 350.1 Rev. 2.0	Ammonia-N	0.035		mg N/L	P363632	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P363706	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.038		mg N/L	P363311	
	EPA 365.1 Rev. 2.0	Total-P	0.25		mg P/L	P363350	
	SM 5310 B-00	Organic Carbon	30		mg C/L	P363433	
2082685	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.22		mg P/L	P363255	

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P363261

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P363557

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P363559

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P363632

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P363706

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P363310

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P363311

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P363350

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P363255

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B
Batch ID: P363281

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P363868

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-97
Batch ID: P363571

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P363452

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P363761

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P363433

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P363557

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P363559

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P363632

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	102		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P363706

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	101		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P363310

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	101		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P363311

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P363350

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	101		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P363255

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.7		P	90 - 110

Reference Method: SM 2120 B
Batch ID: P363281

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.8		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P363868

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P363761

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.5		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P363433

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P363557

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2082680	Chloride	97.6		P	90 - 110
2082792	Chloride	97.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P363559

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2082680	Sulfate	99.4		P	90 - 110
2082792	Sulfate	98.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P363632

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2082696	Ammonia-N	100	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P363706

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2082667	Kjeldahl Nitrogen	107	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P363310

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2082505	NO2NO3-N	98.1	97.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P363311

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2082683	NO2NO3-N	96.6	96.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P363350

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2082506	Total-P	101	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P363255

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2082652	O-Phosphate-P	93.1	95.8	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P363761

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2082695	Fluoride	98.3	98.3	P/P	89 - 106

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P363433

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2082651	Organic Carbon	97.5	98.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P363261

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082764	Turbidity	1.78	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P363557

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082680	Chloride	0.0280	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P363559

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082680	Sulfate	0.0572	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P363632

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082696	Ammonia-N	2.05	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P363706

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082667	Kjeldahl Nitrogen	3.69	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P363310

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082505	NO2NO3-N	0.922	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P363311

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082683	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P363350

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082506	Total-P	2.13	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P363255

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082652	O-Phosphate-P	2.86	Spike	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P363281

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082650	Color (true)	0.744	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P363868

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082695	Total Alkalinity	0.0473	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
 Batch ID: P363571

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082764	TDS	1.06	Sample	P	0 - 10

Reference Method: SM 2540 D-97
 Batch ID: P363452

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082764	TSS	5.71	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P363761

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082695	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
 Batch ID: P363433

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2082651	Organic Carbon	0.589	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
 Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A91162

Included Lab Sample IDs: 2082684, 2082685

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.1	93.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A91163

Included Lab Sample IDs: 2082680, 2082681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105

Reference Method: SM 2120 B

Run ID: A91168

Included Lab Sample IDs: 2082680, 2082681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	90 - 115
Color (true)	102	101	P/P	90 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A91184

Included Lab Sample IDs: 2082682, 2082683

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	102	P/P	90 - 110
NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A91222

Included Lab Sample IDs: 2082683

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	103	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A91225

Included Lab Sample IDs: 2082682, 2082683

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.8	94.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A91228

Included Lab Sample IDs: 2082680, 2082681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	100	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A91255

Included Lab Sample IDs: 2082682

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	99.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A91302

Included Lab Sample IDs: 2082682, 2082683

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A91346

Included Lab Sample IDs: 2082680, 2082681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A91365

Included Lab Sample IDs: 2082682, 2082683

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.9	94.5	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A91397

Included Lab Sample IDs: 2082680, 2082681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.1	103	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					1.78	
EPA 300.0 Rev. 2.1	Chloride	97.0	97.6	97.9		0.0280	
	Sulfate	97.7	99.4	98.9		0.0572	
EPA 350.1 Rev. 2.0	Ammonia-N	102	100	103			2.05
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	107	102			3.69
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	101	98.1	97.1			0.922
	NO ₂ NO ₃ -N	102	96.6	96.6			0.0
EPA 365.1 Rev. 2.0	Total-P	101	101	104			2.13
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.7	93.1	95.8			2.86
SM 2120 B	Color (true)	98.8				0.744	
SM 2320 B-97	Total Alkalinity	102				0.0473	
SM 2540 C-97	TDS					1.06	
SM 2540 D-97	TSS					5.71	
SM 4500 F-C-97	Fluoride	97.5	98.3	98.3			0.0
SM 5310 B-00	Organic Carbon	96.6	97.5	98.3			0.589

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2082680, 2082681
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2082680, 2082681
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2082680, 2082681
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2082682, 2082683
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2082682, 2082683
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2082682, 2082683
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2082682, 2082683
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2082684, 2082685
SM 2120 B / E31780	True Color measured at 450 nm	2082680, 2082681
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2082680, 2082681
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2082680, 2082681
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2082680, 2082681
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2082680, 2082681
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2082682, 2082683

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	05/02/2019			05/02/2019 16:16	Adrian Shelby	2082680, 2082681
EPA 300.0 Rev. 2.1	05/02/2019			05/07/2019 16:09	Lipi Saha	2082680
	05/02/2019			05/07/2019 17:22	Lipi Saha	2082681
EPA 350.1 Rev. 2.0	05/02/2019			05/08/2019 12:12	Ping Hua	2082683
	05/02/2019			05/08/2019 12:13	Ping Hua	2082682
EPA 351.2 Rev. 2.0	05/02/2019	05/09/2019 13:00	Adrian Shelby	05/10/2019 13:06	Joseph Suarez	2082682
	05/02/2019	05/09/2019 13:00	Adrian Shelby	05/10/2019 13:08	Joseph Suarez	2082683
EPA 353.2 Rev. 2.0	05/02/2019			05/03/2019 10:38	Beverly Y. Sanders	2082682
	05/02/2019			05/03/2019 10:45	Beverly Y. Sanders	2082683
EPA 365.1 Rev. 2.0	05/02/2019	05/03/2019 12:30	Sima Feizi	05/06/2019 14:38	Beverly Y. Sanders	2082683
	05/02/2019	05/03/2019 12:30	Sima Feizi	05/07/2019 14:27	Beverly Y. Sanders	2082682
EPA 365.1 Rev. 2.0 dissolved	05/02/2019			05/02/2019 12:44	Jhamieka S. Greenwood	2082684
	05/02/2019			05/02/2019 12:45	Jhamieka S. Greenwood	2082685
SM 2120 B	05/02/2019			05/02/2019 14:31	Mariam Hanna	2082680
	05/02/2019			05/02/2019 14:52	Mariam Hanna	2082681
SM 2320 B-97	05/02/2019			05/14/2019 00:56	Dale L. Simmons	2082680
	05/02/2019			05/14/2019 01:05	Dale L. Simmons	2082681
SM 2540 C-97	05/02/2019			05/03/2019 15:25	Mariam Hanna	2082680, 2082681
SM 2540 D-97	05/02/2019			05/03/2019 16:35	Mariam Hanna	2082680, 2082681
SM 4500 F-C-97	05/02/2019			05/09/2019 13:34	Dale L. Simmons	2082680
	05/02/2019			05/09/2019 13:45	Dale L. Simmons	2082681
SM 5310 B-00	05/02/2019			05/06/2019 16:45	Lauren Lees	2082682
	05/02/2019			05/06/2019 16:57	Lauren Lees	2082683